WOODSTOCK

SHOP FOX®

INTERNATIONAL

MODEL W1727
1 HP DUST COLLECTOR

OWNER'S MANUAL

(FOR MODELS MANUFACTURED SINCE 5/09)

Phone: 1-360-734-3482 • On-Line Technical Support: tech-support@shopfox.biz

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WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.

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⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

INTRODUCTION

Woodstock Technical Support

We stand behind our machines! In the event that a defect is found, parts are missing, or questions arise about your machine, please contact Woodstock International Technical Support at 1-360-734-3482 or send e-mail to: **tech-support@shopfox.biz**. Our knowledgeable staff will help you troubleshoot problems, send out parts, or arrange warranty returns.

If you need the latest edition of this manual, you can download it from **http://www.shopfox.biz**.
If you still have questions after reading the latest manual, or if you have comments please contact us at:

Woodstock International, Inc.
Attn: Technical Support Department
P.O. Box 2309
Bellingham, WA 98227

About Your New W1727 Dust Collector

Your new Model W1727 **SHOP FOX®** 1 HP Dust collector has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation. Depending on the design of the dust collection system, this dust collector can draw up to 800 CFM. The Model W1727 can be used for household or commercial purposes.

Woodstock International, Inc. is committed to customer satisfaction in providing this manual. It is our intent to make sure all the information necessary for safety, ease of assembly, practical use and durability of this product be included.

Specifications

Motor	1 HP, 9A/4.5A, 120V/240V, 3450 RPM, Single-Phase
Impeller	10" Radial Fin (6-Blade)
Static Pressure	5.67" (of water)
Air Suction	800 CFM
Lower Bag Capacity	2.1 (cubic feet)
Upper Bag (Filter Bag)	2.5 Micron Non-Woven Fabric
Lower Bag (Storage Bag)	Plastic
Bag Dimensions	14 3/4" Diameter x 24 3/8" Tall
Height	54 1/4"
Base	15 1/4" x 26"
Dust Port and Elbow Size	4"
Footprint and Overall Height	30 3/4" Wide x 15 3/4" Deep and 54 1/2" High
Approximate Machine Weight	55 lbs.

Controls and Features

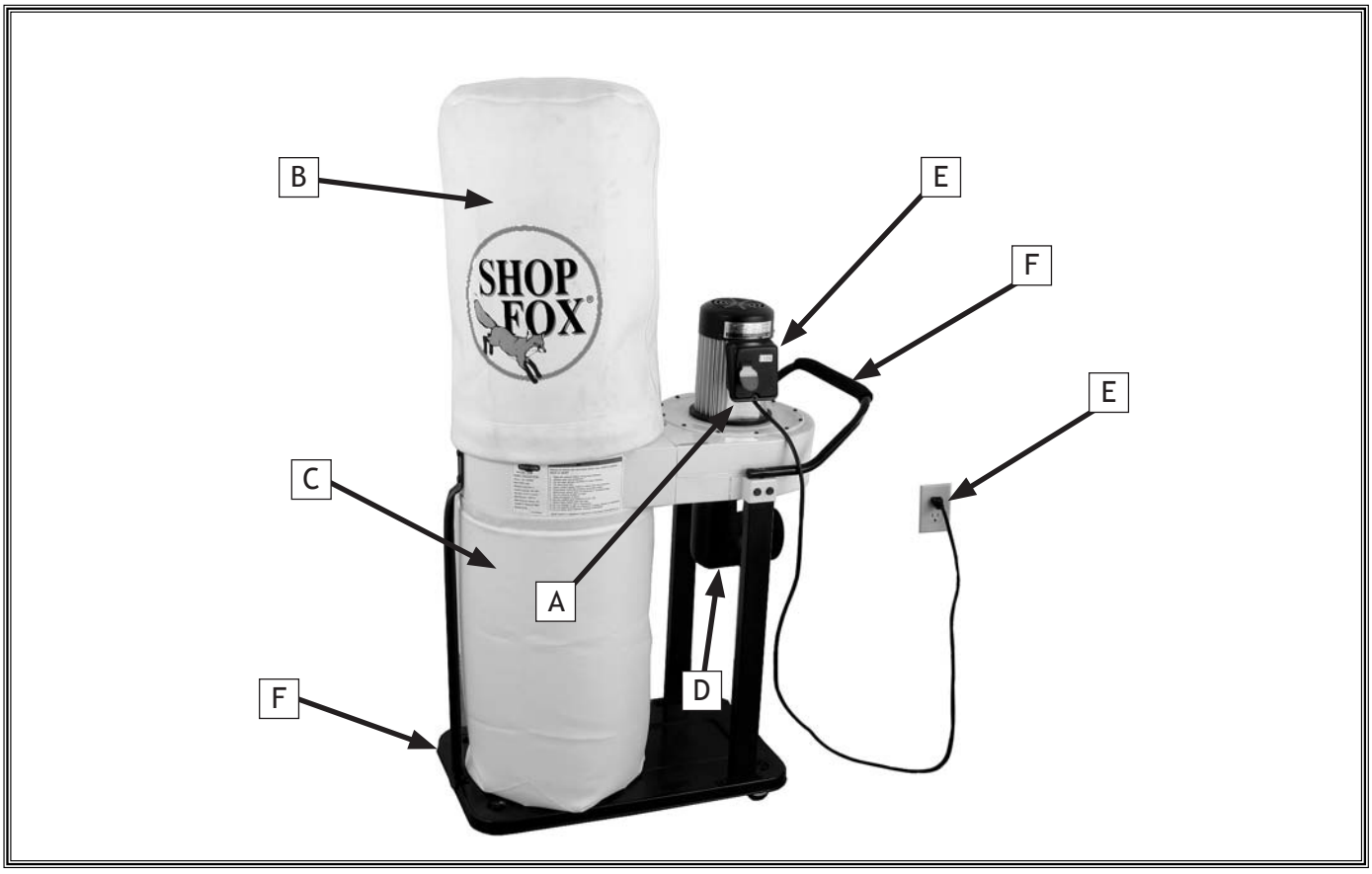


Figure 1. Dust collector controls and features.

A. ON/OFF Lockout Switch w/Key—Allows you to lockout the dust collector to prevent unsupervised use.

B. Dust Filtration Bag—Filters wood dust down to 2.5 microns from the collected air, and allows the dust to fall and collect in the lower dust storage bag.

C. Dust Storage Bag—Stores 2.1 cubic feet of collected dust in a plastic bag with a quick disconnect bag clamp.

D. 4" Elbow—Included with dust collector; however, it can be removed to allow for a smoother bend in ducting and slightly increased CFM.

E. Prewired 120V 1 HP motor and plug—Allows you to use most existing 120V receptacles so you can get your dust collection system operating quickly.

F. Roller Base and Handle—Supports the lower bag and the dust collector, and allows you to quickly and easily roll and locate your dust collector where you want it.

SAFETY

For Your Own Safety, Read Manual Before Operating Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures—this responsibility is ultimately up to the operator!

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.**

Standard Machinery Safety Instructions

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with workpiece materials, and always wear a NIOSH-approved respirator to reduce your risk.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

DANGEROUS ENVIRONMENTS. Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well-lighted to minimize risk of injury.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

ONLY USE AS INTENDED. Only use machine for its intended purpose. Never modify or alter machine for a purpose not intended by the manufacturer or serious injury may result!

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

REMOVE ADJUSTING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

NEVER STAND ON MACHINE. Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

STABLE MACHINE. Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine off and ensure all moving parts completely stop before walking away.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine may increase the risk of serious injury.

CHECK DAMAGED PARTS. Regularly inspect machine for damaged parts, loose bolts, mis-adjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged parts, wires, cords, or plugs before operating machine.

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle the cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet or damp locations.

EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support for help at (360) 734-3482.

Additional Safety for Dust Collectors

INTENDED USE. This dust collector is only intended for collecting wood dust and chips from woodworking machines. DO NOT use this dust collector to collect metal, dirt, pebbles, drywall, asbestos, lead paint, silica, liquids, aerosols, or any flammable, combustible, or hazardous materials.

OPERATING LOCATION. To reduce respiratory exposure to fine dust, locate permanently installed dust collectors away from the working area, or in another room that is equipped with a smoke detector. DO NOT operate the dust collector in rainy or wet locations—exposure to water may create a shock hazard or decrease machine life.

DISCONNECTING POWER SUPPLY. Turn the switch ***OFF***, disconnect the dust collector from the power supply, and allow the impeller to completely stop before leaving the machine unattended or doing any service, cleaning, maintenance, or adjustments.

IMPELLER HAZARDS. DO NOT place your hair, loose clothing, hands, or tools near the open inlet during operation for any reason. Only operate machine with ducting attached to inlet. The powerful suction could easily cause accidental contact with the impeller, which will cause serious personal injury or damage to the machine. Always keep small animals and children away from open dust collection inlets.

HAZARDOUS DUST—WEAR RESPIRATOR. Fine dust that is too small to be caught in the filter will be blown into the ambient air during operation. Always wear a NIOSH-approved respirator during operation and for a short time after to reduce your risk of permanent respiratory damage.

DUST ALLERGIES. Dust from certain woods may cause an allergic reaction in people and animals. Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction.

EMPTYING DUST. When emptying dust from the collection container, wear a respirator and safety glasses. Empty dust away from ignition sources and into an approved container.

FIRE SUPPRESSION. Only operate the dust collector in locations that contain a fire suppression system or have a fire extinguisher nearby.

SUSPENDED DUST PARTICLES AND IGNITION SOURCES. DO NOT operate the dust collector in areas where explosion risks are high. Areas of high risk include, but are not limited to, areas near pilot lights, open flames, or other ignition sources.

AVOIDING SPARKS. DO NOT allow steel or rocks to strike the impeller—this may produce sparks. Sparks can smolder in wood dust for a long time before a fire is detected. If you accidentally cut into wood containing tramp metal (nails, staples, spikes, etc.), immediately turn ***OFF*** the dust collector, disconnect it from power, and wait for the impeller to stop—then empty the collection container into an approved airtight metal container.

STATIC ELECTRICITY. High amounts of static electricity are generated when plastic ducting is used for dust collection lines. Although rare, sparks caused by static electricity can cause explosions or fire. To reduce this risk, thoroughly ground all plastic ducting used in the dust collection system.

REGULAR CLEANING. Regularly check/empty the collection bags or drum to avoid buildup of fine dust that can increase the risk of fire. Make sure to regularly clean the surrounding area where the machine is operated—excessive dust buildup on overhead lights, heaters, electrical panels, or other heat sources will increase the risk of fire.

Avoiding Potential Injuries

Figure 2. ALWAYS wear a respirator and safety glasses when emptying dust bags.

Figure 4. NEVER leave the dust collector plugged in and unattended.

Figure 3. NEVER stand or ride on the dust collector base.

Figure 5. NEVER work around the intake port when the dust collector is operating.

Figure 6. NEVER operate the dust collector without the dust collection bags installed.

POWER SUPPLY

Circuit Requirements

This machine must be connected to the correct size and type of power supply circuit, or fire or electrical damage may occur. Read through this section to determine if an adequate power supply circuit is available. If a correct circuit is not available, a qualified electrician MUST install one before you can connect the machine to power.

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 120V .....9 Amps
Full-Load Current Rating at 240V ..... 4.5 Amps

Circuit Requirements for 120V (Prewired)

This machine is prewired to operate on a 120V power supply circuit that has a verified ground and meets the following requirements:

Circuit Type ..... 110V/120V, 60 Hz, Single-Phase
Circuit Size ..... 15 Amps
Plug/Receptacle ..... NEMA 5-15

Circuit Requirements for 240V

This machine can be converted to operate on a 240V power supply (details about voltage conversion can be found later in this manual). The 240V power supply circuit must have a verified ground and meet the requirements that follow:

Circuit Type .....220V/240V, 60 Hz, Single-Phase
Circuit Size ..... 15 Amps
Plug/Receptacle ..... NEMA 6-15

⚠WARNING

The machine must be properly set up before it is safe to operate. DO NOT connect this machine to the power source until instructed to do later in this manual.

⚠WARNING

Incorrectly wiring or grounding this machine can cause electrocution, fire, or machine damage. To reduce this risk, only a qualified electrician or service personnel should do any required electrical work for this machine.

NOTICE

The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult a qualified electrician to ensure that the circuit is properly sized for safe operation.

Grounding Requirements

This machine MUST be grounded. In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current to travel—in order to reduce the risk of electric shock.

Improper connection of the equipment-grounding wire will increase the risk of electric shock. The wire with green insulation (with/without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

For 120V Connection (Prewired)

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 5-15 grounding plug. The plug must only be inserted into a matching receptacle (see **Figure**) that is properly installed and grounded in accordance with local codes and ordinances.

For 240V Connection

A NEMA 6-15 plug has a grounding prong that must be attached to the equipment-grounding wire inside the included power cord. The plug must only be inserted into a matching receptacle (see **Figure**) that is properly installed and grounded in accordance with all local codes and ordinances.

Extension Cords

We do not recommend using an extension cord with this machine. Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases with longer extension cords and the gauge smaller gauge sizes (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge Size at 240V ..... 14 AWG
Maximum Length (Shorter is Better) ..... 50 ft.

⚠WARNING

The machine must be properly set up before it is safe to operate. DO NOT connect this machine to the power source until instructed to do later in this manual.

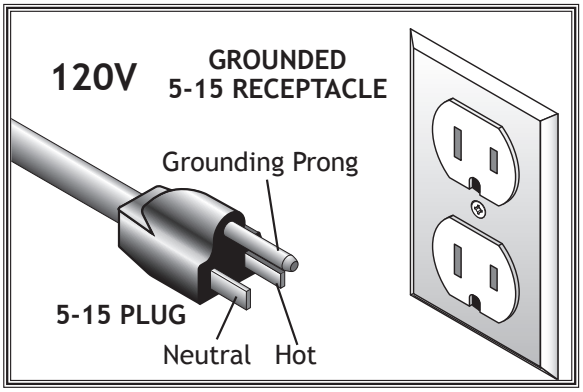


Figure 7. NEMA 5-15 plug & receptacle.

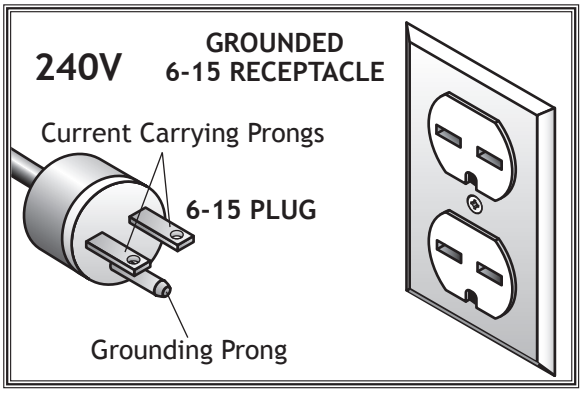


Figure 8. NEMA 6-15 plug & receptacle.

⚠CAUTION

DO NOT modify the provided plug or use an adapter if the plug will not fit your receptacle. This is an indication that your power supply circuit does meet the requirements for the machine; have an electrician install the correct power supply circuit. If the machine must be reconnected for use on a different type of electric circuit, the reconnection should be made by a qualified electrician or service personnel; after reconnection, the machine must comply with all local codes and ordinances.

SETUP

Inventory

The following is a description of the main components carefully packaged with your **SHOP FOX®** Model W1727 1 HP Dust collector. See **Figure 9** and refer to the list below and inventory your shipment.

If any part is missing, examine the packaging carefully to be sure the part is not among the packing materials. If the part is not found, find the part number in the back of this manual and contact Woodstock International, Inc. at 360-734-3482 or at tech-support@shopfox.biz

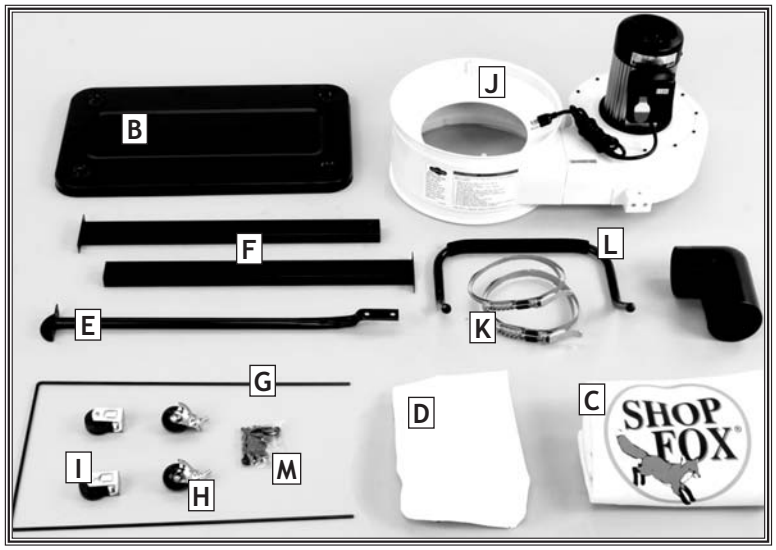
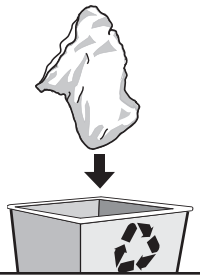


Figure 9. Dust collector inventory.

A. Elbow 4"
B. Base
C. Upper Bag
D. Lower Bag
E. Round Support
F. Rectangle Supports (2)
G. Bag Support
H. Swivel Casters (2)
I. Fixed Casters (2)
J. Impeller/Separator
K. Bag Clamps (2)
L. Handle
M. Hardware Bag
- Hex Bolt 5/16"-18 x 1/2" (6)
- Acorn Nut 5/16"-18 (2)
- Flat Washer 5/16" (2)
- Flat Head Screw 5/16"-18 x 1" (2)
- Flange Screw 10-24 x 3/8" (1)
- Open-End Wrench 10-12MM (1)
- Hex Wrench 5mm (1)
- Cap Screw M6-1 x 10 (4)
- Phillips Hd Screw #10-24 x 1/2" (1)

⚠WARNING

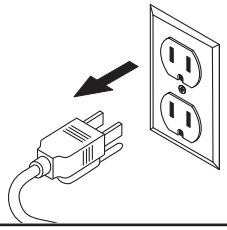


Immediately discard all plastic bags and packing materials to eliminate a choking and suffocation hazard for children and animals.

⚠WARNING

READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

⚠WARNING



UNPLUG the power cord before you do any assembly or adjustment tasks! Otherwise electrocution may occur!

Base & Supports

For quiet and vibration-free operation, assemble your dust collector as outlined below. DO NOT modify this dust collector for any other purpose than what it is designed for.

To assemble this dust collector, do these steps:

1. **MAKE SURE THE DUST COLLECTOR MOTOR IS UNPLUGGED!**

2. Install two swivel casters with the two $^{5}/_{16}$"-18 acorn nuts and $^{5}/_{16}$" flat washers (see **Figure 10**).

3. Install the two fixed casters with the four M6-1 x 10 cap screws (see **Figure 10**).

4. Place the round and rectangle support mounting flanges against the base, and install with six $^{5}/_{16}$"-18 x $^{1}/_{2}$" hex bolts (see **Figure 10**).

5. With the help of an assistant, attach the impeller/separator assembly to the supports with the remaining six $^{5}/_{16}$"-18 x $^{1}/_{2}$" hex bolts (see **Figure 11**).

6. Position the elbow as shown in **Figure 11,** and secure it in place with the 10-24 x $^{3}/_{8}$" flange screw.

7. Position the handle as shown in **Figure 11,** and secure it in place with two $^{5}/_{16}$"-18 x 1" flat head screws.

8. Insert the ends of the bag support into the receivers welded to the impeller/separator assembly until the ends are completely seated (see **Figure 11**).

9. Insert the bag clamps into the hemmed rim of each dust collector bag.

10. Install the dust filter bag on the top of the dust collector bag housing (the **SHOP FOX®** logo is printed on it), and snap the bag clamp lever closed.

11. Install the lower plastic dust collection bag, and snap the bag clamp lever closed.

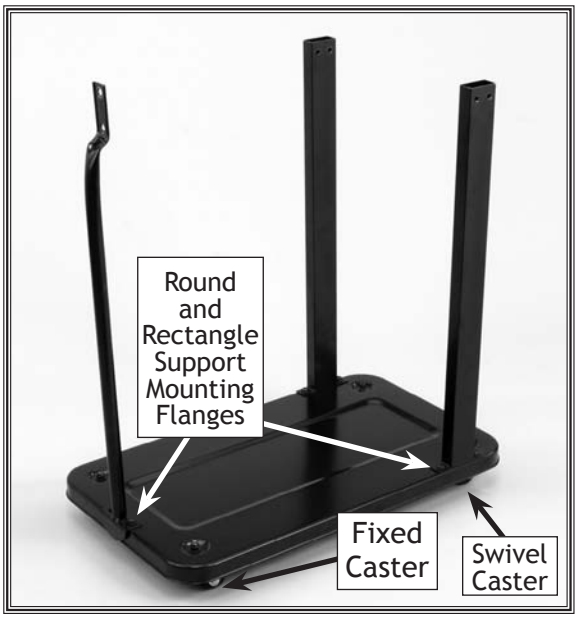


Figure 10. Base assembly.

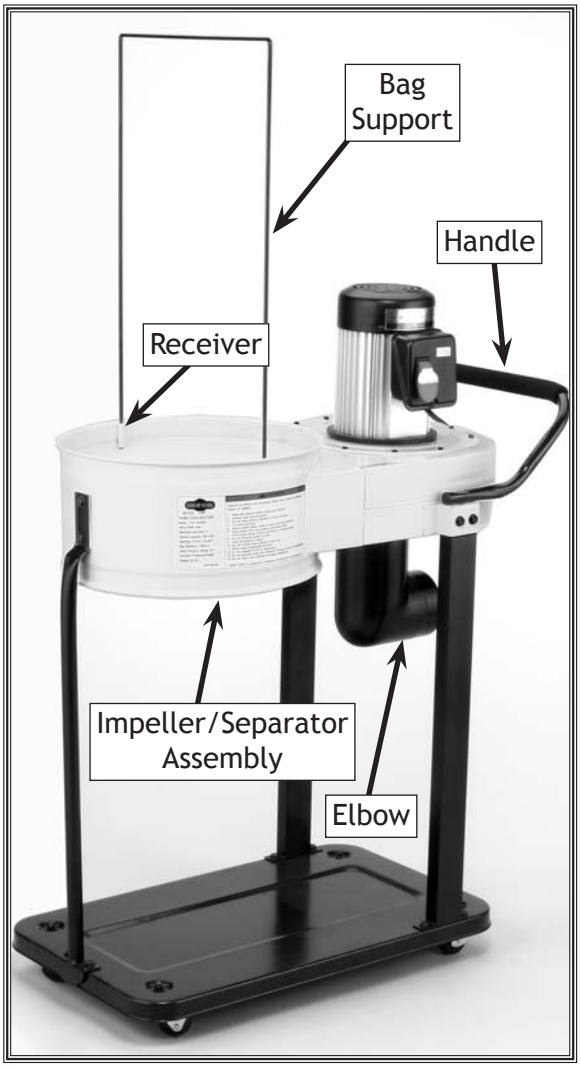


Figure 11. Basic assembly.

Duct Grounding

Under some circumstances, static electricity can be generated in dust collection systems and can collect on the plastic ducting surfaces. If this static electricity is discharged through a spark, there is a potential for the dust and oxygen in the ducting to ignite.

Therefore, your dust collection system must be grounded one of three ways.

- **First**, the ground is achieved by means of using metal ducting throughout the system. All static electricity buildup is carried through the continuous metal ducting and dissipated through the dust collector impeller housing.

- **Second**, for plastic pipe or hose ducting systems, install an uncoated bare copper wire inside the entire length of all ducting. An additional wire must be spiral-wrapped on the outside of all the ducting (see **Figure 12**). Both wires must be connected to the dust collector impeller housing (see **Figure 13**) so all static electricity inside and out of the ducting is carried through the wires and dissipated through the dust collector ground.

  If the system has branches, place wires in the same fashion and connect to the wires on the main pipe/hose with wire nuts. If blast gates are to be used, drill exit and entrance holes on either side of the blast gate to allow wire to be fed out of and into the system (see **Figure 14**).

- **Third**, if you use a combination of metal and plastic ducting, make sure that you use a copper grounding wire to ground all plastic connections with the metal ducting so no part of the ducting is insulated by the plastic.

Note: For more in-depth information on Dust Collection System design, refer to refer to *The Dust Collection Handbook* (ISBN 0-9635821-2-7), which is available for purchase through any Woodstock/**SHOP FOX®** Dealer.

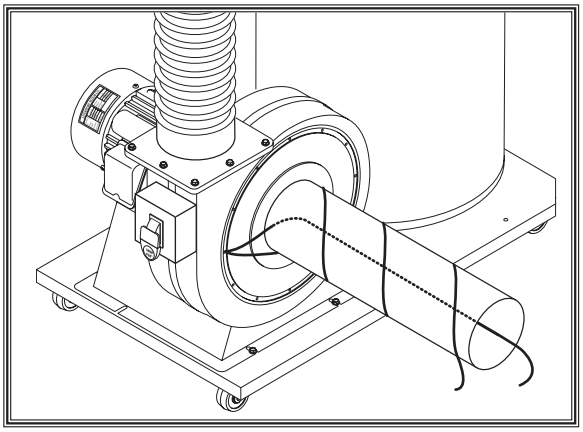


Figure 12. Typical dust collector with ground wire installed inside and around pipe.

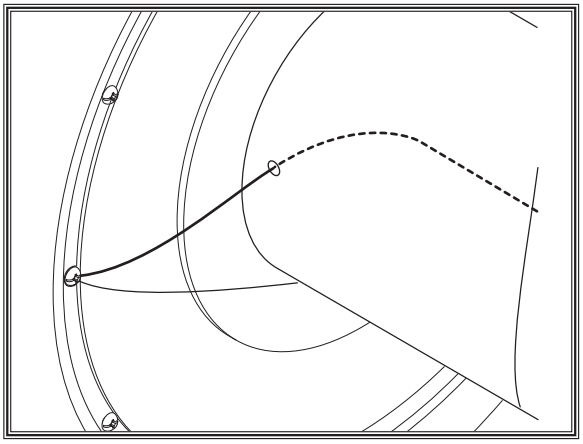


Figure 13. Typical dust collector impeller housing with ground wires secured to the housing.

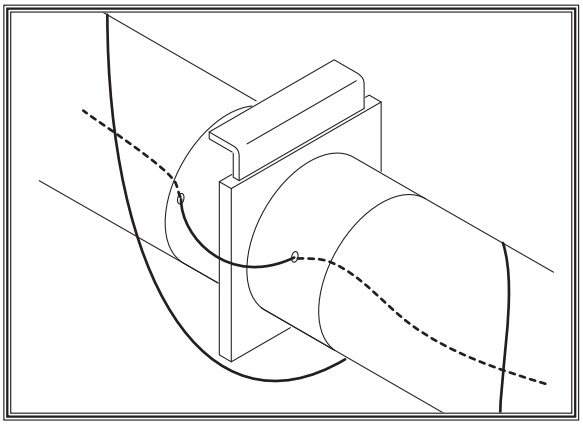


Figure 14. Ground wires bypassing a blast gate.

Power Connection

Before the machine can be connected to the power source, an electrical circuit and connection device must be prepared per the **POWER SUPPLY** section on **Page 8**, and all previous setup instructions in this manual must be complete to ensure that the machine has been assembled and installed properly.

Always make sure the machine is turned ***OFF*** before connecting power.

Insert the plug attached to the machine power cord into a matching power supply receptacle. The machine is now connected to the power source.

If you need to disconnect the machine from power later, pull the plug completely out of the receptacle.

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the safety disabling mechanism on the switch works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 21**. If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

To test run the machine:

1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is setup properly.

2. Make sure all the dust collection ducting and fasteners are tight, and that all tools and objects used during set up are cleared away so they will not get sucked into the dust collection intake.

3. Verify that the machine is operating correctly by turning the machine ***ON***.

   —When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   — Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

4. Turn the machine ***OFF***.

5. Remove the switch disabling key (**Figure 15**).

6. Try to start the machine with the paddle switch.

   —If the machine does not start, the switch disabling feature is working as designed.

   —If the machine starts, immediately stop the machine. The switch disabling feature is not working correctly. Call Tech Support for help.

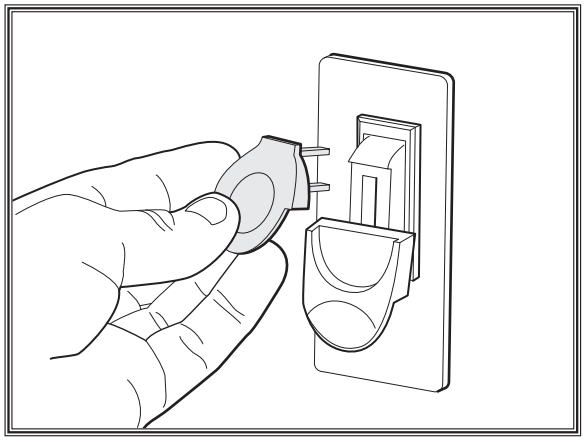


Figure 15. Removing switch key from paddle switch.

OPERATIONS

General

Depending on your dust collection ducting design, your Model W1727 1 HP Dust collector can draw up to 800 CFM. However, system CFM can be reduced greatly if the wrong duct size, length, or too many duct bends are used.

We recommend that you read books, trade articles or seek training with the proper use of dust collectors. This research will pay off with your increased safety and better results from your machine. For in-depth information, refer to *The Dust Collection Handbook* (ISBN 0-9635821-2-7), and above all, safety comes first.

⚠WARNING

Dust collectors do not eliminate the fine, and most harmful, dust from the workshop. Always wear a NIOSH approved respirator to help protect yourself from the respiratory dangers caused by the inhalation of fine dust.

Operation

This dust collector is designed for collecting dust from one machine at a time and is NOT designed to power a whole-shop dust collection system, nor serve as a central whole-house vacuum. For safe operation and the best dust collection results, please follow the rules below:

- DO NOT collect metal pieces, glass, or liquid with this dust collector. It is intended for collecting wood dust only (**Figure 16**). Metal pieces may spark when they contact the impeller and cause a fire.
- USE a 4" dust collection hose that is as short as possible. Remember, the longer the hose the less CFM your dust collector will draw.
- AVOID using additional 90° elbows or 45° elbows. These fittings will decrease the overall efficiency of the dust collector.
- GROUND your dust collection hose to protect against unpleasant static shock, and in the worst case, an accidental fire.
- USE smooth-walled ducting whenever possible; corrugated flexible ducting typically has a higher potential for static pressure loss.

Figure 16. DO NOT collect metal pieces, glass, or liquid with this dust collector.

Dust Collector Accessories

The following accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800-840-8420 or at sales@woodstockint.com.

Quick Disconnect (Model W1038)

This is the perfect accessory for those who will use the dust collector for multiple machines. The quick disconnect is designed to attach to a 4" hose and press onto any 4" diameter dust port. The quick disconnect works with a friction fit to eliminate the inconvenience of tightening/loosening hose clamps.

Universal Adapter (Model W1039)

Providing options for seven different sizes, this universal adapter allows you to connect your dust collector to machines with dust ports smaller than 4". This is a "must-have" for miter saws or when connecting your dust collector to common vacuum hoses.

Remote Switch (Model D3038 120V or D3346 240V)

Turn your dust collector **ON** or **OFF** from up to 75 feet away. The D3038 remote switch controls 120V-20A dust collectors up to 1½ HP, and the D3346 remote switch controls 240V-20A dust collectors up to 3 HP. Each unit comes with two hand-held remote controllers.

Grounding Kit (Model W1053)

All dust collectors generate static electricity in the ducting system. If a series of conditions are in place, and the dust collection ducting is not grounded, a spark from static electricity buildup could ignite the fine wood dust particles in the dust collector. To reduce this ignition hazard, install a grounding kit.

Deluxe Ceiling Mounted Air Cleaner (Model W1690)

Air cleaners are a great solution for removing airborne dust particles. This air cleaner has three speeds (556, 702, and 1,044 CFM) and a primary and secondary filter to remove dust particles as small as 2½" Micron. Install this air cleaner on a work bench, on a wall, or suspend it from your shop ceiling.

MAINTENANCE

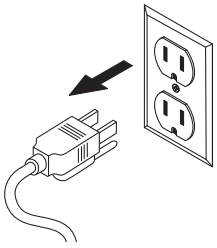
General

Regular periodic maintenance on your **SHOP FOX®** Model W1727 will ensure its optimum performance. Make a habit of inspecting your dust collector each time you use it.

Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn or damaged switch, switch-safety key, electrical cords and plugs.
- Any other condition that could hamper the safe operation of this machine.
- Loud rubbing, vibration or tapping noises coming from motor or impeller housing.

⚠WARNING



MAKE SURE that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

Collector Bag Cleaning

The lower dust storage bag is intended to be cleaned by simply emptying it.

To clean the collector bag, do these steps:

1. Put on your safety glasses and respirator.
2. Unlatch the retaining band clamp, and remove the lower bag from the dust collector.
3. Position the bag over the garbage can, and gently shake the collector bag to empty the sawdust.
4. Reinstall the bag on the dust collector.

⚠WARNING

Emptying the collector bag exposes you to harmful dust. Always wear a respirator and safety goggles when emptying the collector bag!

Machine Cleaning

Put on your respirator and safety glasses and blow-off sawdust with compressed air. Dust build-up around the motor is a sure way to decrease its life span.

Maching Storage

Before placing the machine in storage, empty the dust collection bag. Roll up the cord and secure it to the machine so it cannot be damaged by nearby traffic. Store the machine away from all heat sources, wet locations, and hazardous/flammable liquids.

SERVICE

General

This section covers the most common service adjustments that may need to be made during the life of your machine.

If you require additional machine service information not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: **tech-support@shopfox.biz**.

Rewiring for 240V

If you want to run your dust collector on 240V, then it must be rewired inside the switch box and a new plug must be installed on the machine. The rewiring job must be inspected by a qualified electrician before the machine is reconnected to a power source. Please read the **Power Supply** section on **Page 8** before beginning this procedure.

To rewire your dust collector for 240V operation, do these steps:

1. **UNPLUG THE DUST COLLECTOR!**

2. Open the switch box cover by removing the screw that secures it (as shown in **Figure 17**).

3. Rewire the wires inside the switch box, according to the 240V diagram shown on the inside cover of the switch box.

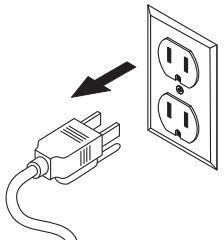
   Note: Refer to the **240V Wiring Diagram** on **Page 20** or contact our technical support personnel if you need additional help with this procedure.

4. After rewiring, make sure the wire nuts are tight and are secured in place with electrical tape.

5. Install a 6-15 240V plug as specified in the **Power Supply** section on **Page 9**.

6. Have your wiring job inspected by a qualified electrician, then replace the switch box wiring cover.

WARNING



MAKE SURE that your machine is unplugged during all service procedures! If this warning is ignored, serious personal injury may occur.

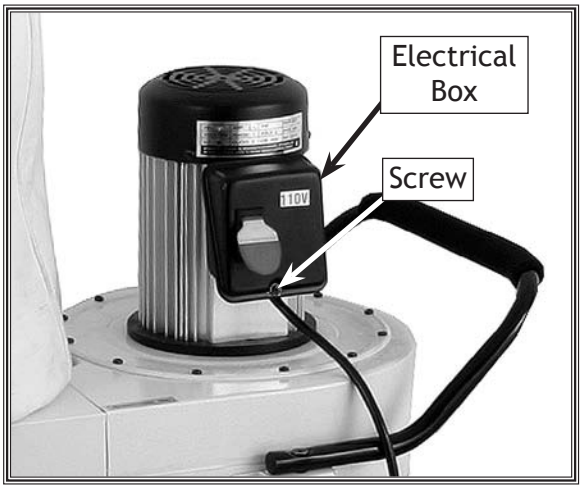
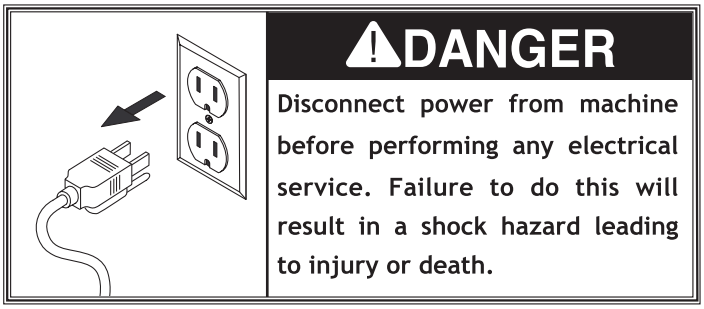


Figure 17. Electrical box.

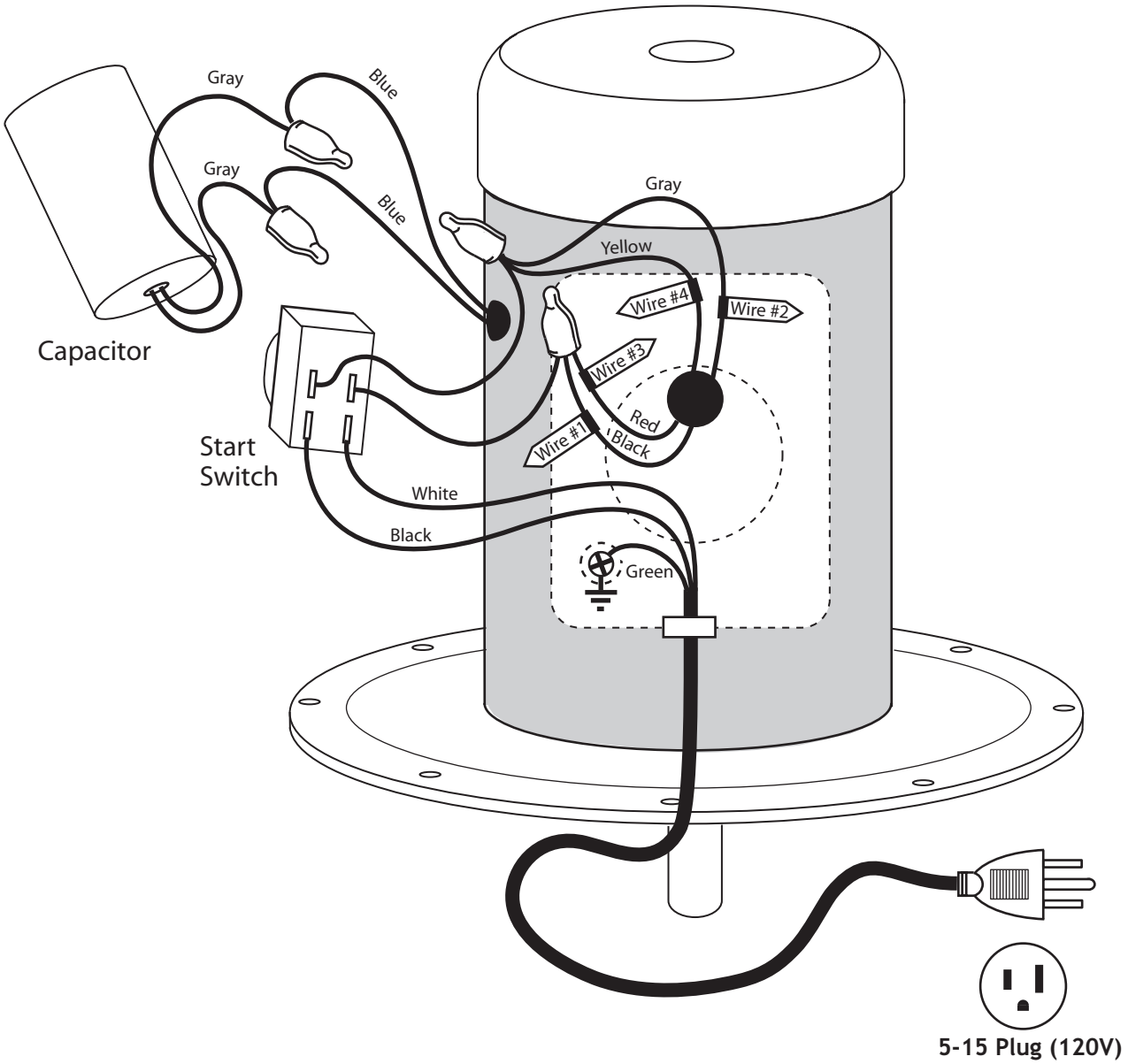
120V Wiring Diagram



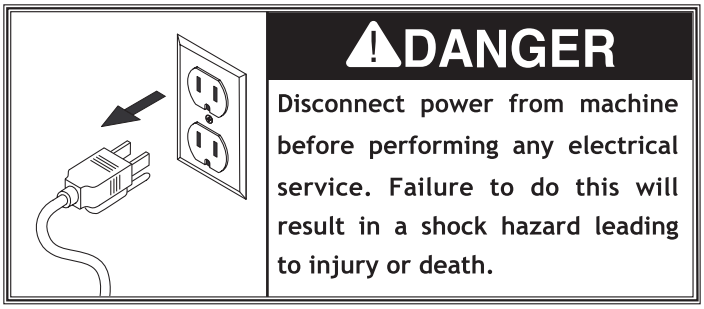
⚠DANGER

Disconnect power from machine before performing any electrical service. Failure to do this will result in a shock hazard leading to injury or death.

Prewired 120V Connection



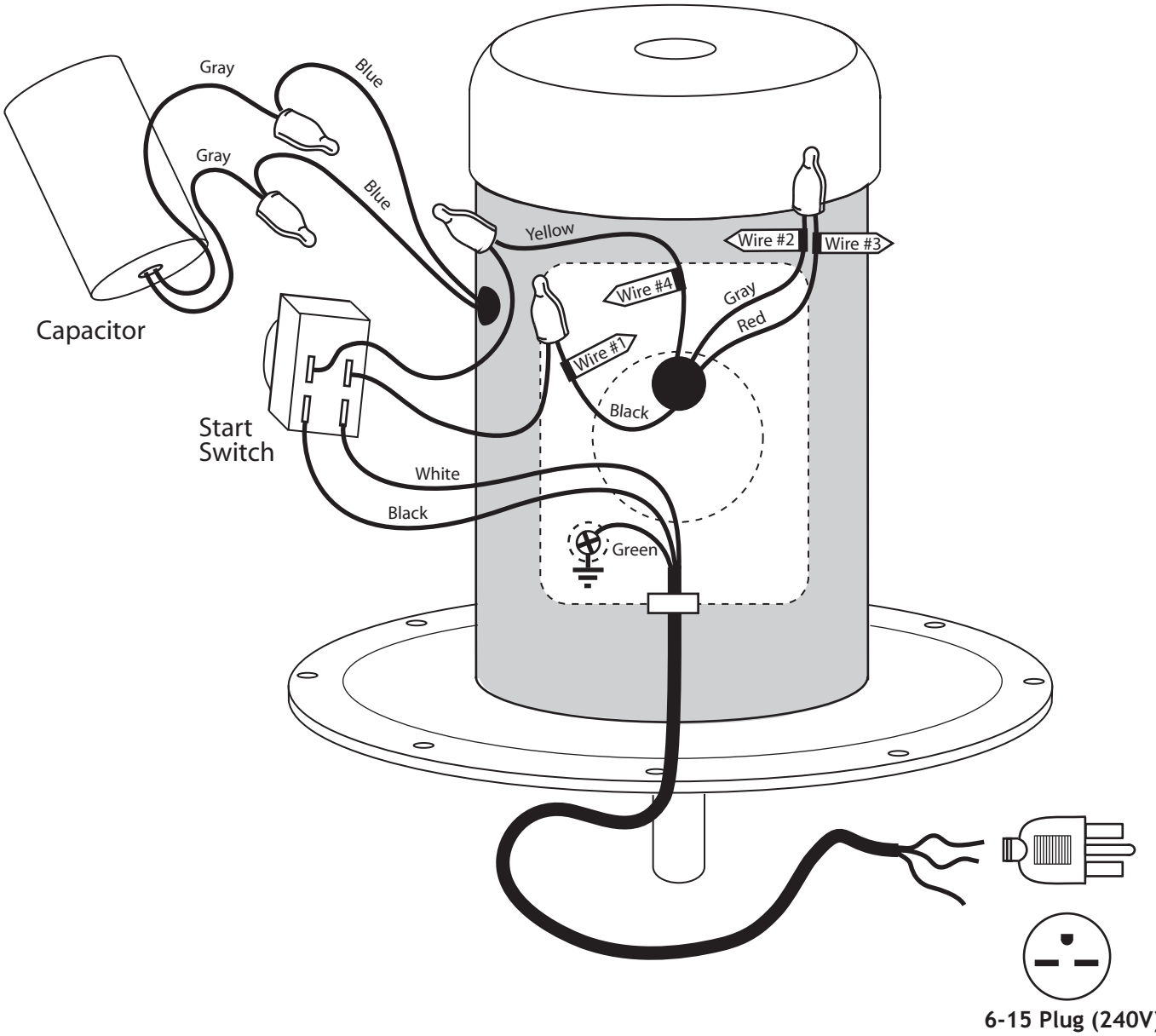
240V Wiring Diagram



⚠DANGER

Disconnect power from machine before performing any electrical service. Failure to do this will result in a shock hazard leading to injury or death.

Optional 240V Connection



6-15 Plug (240V)

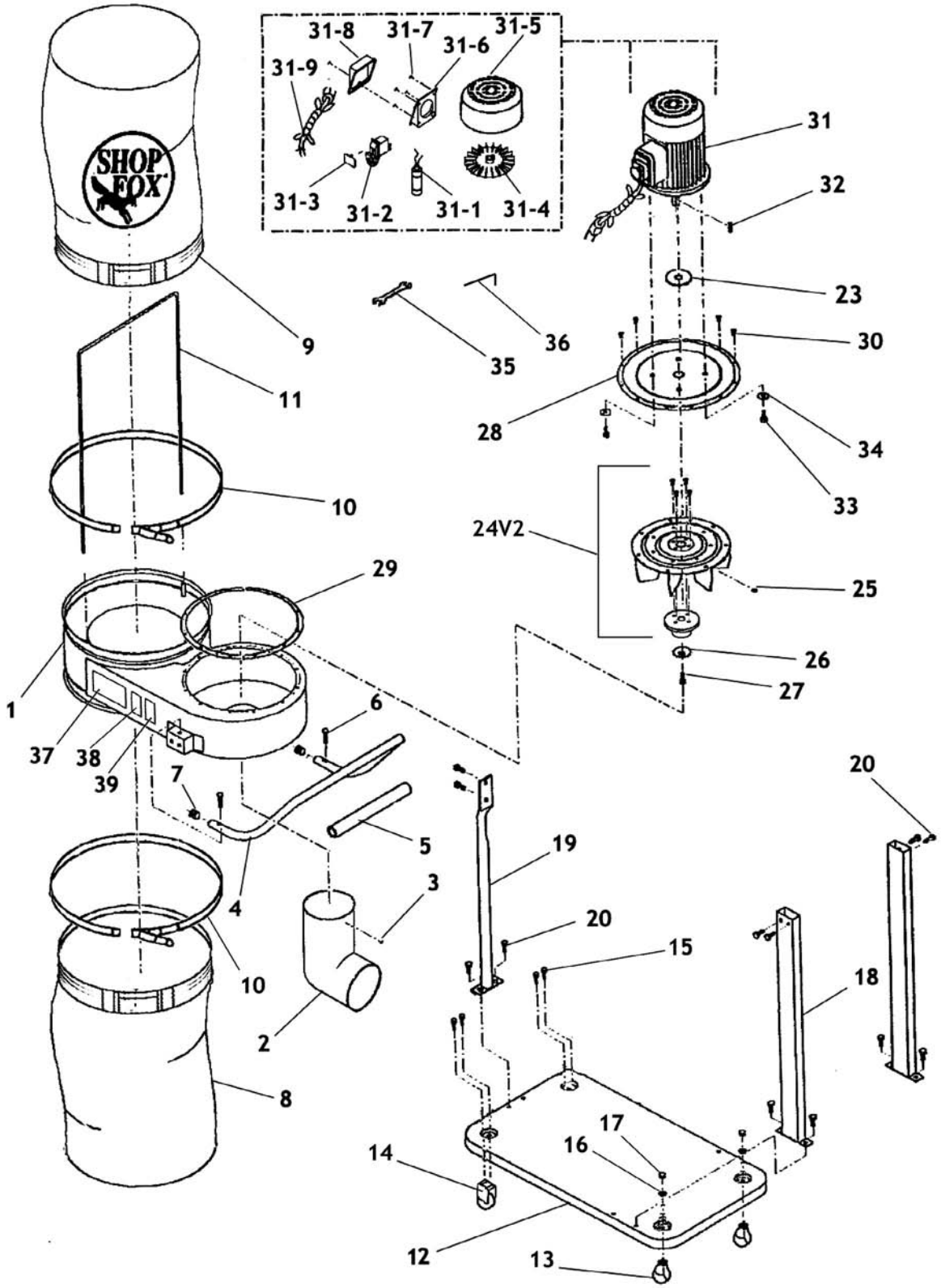
Troubleshooting

This section covers the most common dust collector problems. DO NOT make any adjustments until the dust collector is unplugged and moving parts have come to a complete stop.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor will not start, or it growls on start up.	1. Power supply fuse or circuit breaker has tripped. 2. Toggle switch is broken inside. 3. Start capacitor is at fault. 4. Motor fan cover is dented, stopping the fan from being able to spin. 5. Motor is at fault.	1. Disconnect power, and inspect circuit for electrical shorts and repair. Replace circuit breaker if it is old or has tripped many times. 2. Disconnect power, and use an ohmmeter to check switch terminals for continuity, and replace switch if required. 3. Replace start capacitor. 4. Replace motor fan cover (and fan, if damaged). 5. Replace motor.
Motor runs slower than normal.	1. Poor electrical connection. 2. Low power source voltage. 3. Motor is at fault.	1. Inspect the power supply for loose, corroded, or overheated electrical connections and repair. 2. Have the power source voltage checked; reduce the length of extension cord. 3. Replace the motor.
Loud, repetitious noise, or excessive vibration coming from dust collector.	1. Dust collector is not on a flat surface and wobbles. 2. Impeller fan is damaged and unbalanced. 3. The motor mounting is loose. 4. Impeller is loose on the motor shaft. 5. Motor fan cover is dented, causing the motor fan to hit the cover while spinning.	1. Stabilize the dust collector. 2. Unplug dust collector, and inspect the impeller for dents, bends, loose fins. Replace impeller if any damage is found. 3. Make sure all fasteners on the dust collector are tight. 4. Replace the motor and impeller as a set if the motor shaft and the impeller hub is damaged. 5. Replace motor fan cover.
Dust collector does not adequately collect dust or chips; poor performance.	1. Dust collection bags are full. 2. There is a restriction at the inlet grate. 3. The dust collector is too far away from the point of suction, or there are too many sharp bends in the ducting. 4. The lumber is wet and not flowing through the dust lines smoothly. 5. There is a leak in the ducting, or a series of small leaks, or too many open ports. 6. There is a restriction in the ducting, or the ducting and ports are incorrectly sized. 7. The machine dust collection design is inadequate. 8. The dust collector is too small for the dust collection system.	1. Empty bags. 2. Remove dust line from dust collector inlet and clean debris from the inlet grate (and wire-connector, if installed). 3. Relocate the dust collector closer to the point of suction, and rework ducting without sharp bends. Refer to the *Dust Collection Basics* handbook (ISBN 0-9635821-2-7) to help configure your dust system. 4. Process lumber with less than 20% moisture content. 5. Rework the ducting as to eliminate all leaks, and refer to the *Dust Collection Basics* handbook (ISBN 0-9635821-2-7) for more solutions. 6. Rework the ducting as to eliminate all restrictions, and refer to the *Dust Collection Basics* handbook (ISBN 0-9635821-2-7) for more solutions. 7. Ask your dealer for proper dust collection accessories or the **SHOP FOX®** Dust Collection Nozzle on Stand. 8. Install a larger dust collector to power your dust collection system.

PARTS

Main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Main Parts List

REF	PART #	DESCRIPTION
1	X1727001	IMPELLER/SEPARATOR HOUSING
2	X1727002	4" ELBOW
3	XPFS03	FLANGE SCR 10-24 X 3/8"
4	X1727004	HAND RAIL
5	X1727005	FOAM HAND GRIP
6	XPFH25	FLAT HD SCR 5/16"-18 X 1"
7	X1727007	PLASTIC CAP 5/8"
8	X1727008	DUST STORAGE BAG (LOWER)
9	X1727009	DUST FILTRATION BAG (UPPER)
10	X1727010	BAG CLAMP
11	X1727011	BAG SUPPORT
12	X1727012	BASE
13	X1727013	SWIVEL CASTER
14	X1727014	FIXED CASTER
15	XPB04M	HEX BOLT M6-1.0 X 10
16	XPW07	FLAT WASHER 5/16"
17	XPN40	ACORN NUT 5/16"-18
18	X1727018	RECTANGULAR SUPPORT LEG
19	X1727019	ROUND SUPPORT LEG
20	XPB09	HEX BOLT 5/16"-18 X 1/2"
23	X1727023	SHAFT SEAL
24V2	X1727024V2	IMPELLER ASSEMBLY 10" V2.05.09
25	XPSS17	SET SCREW 5/16"-18 X 5/16"

REF	PART #	DESCRIPTION
26	X1727026	SPECIAL 6MM CONCAVE WASHER
27	XPSB02M	CAP SCREW M6-1.0 X 20
28	X1727028	INLET COVER
29	X1727029	FOAM GASKET
30	XPS09M	PHLP HD SCR M5-0.8 X 10
31	X1727031	1 HP MOTOR
31-1	XPC030A	S. CAPACITOR 30M 300V
31-2	XPSW09	SWITCH
31-3	XPSW09-1	SWITCH KEY
31-4	X1727031-4	FAN
31-5	X1727031-5	FAN COVER
31-6	X1727031-6	SWITCH HOUSING
31-7	XPFS03	FLANGE SCR 10-24 X 3/8"
31-8	X1727031-8	SWITCH COVER
31-9	X1727031-9	POWER CORD
32	XPK01M	KEY 5 X 5 X 22MM
33	XPB19	HEX BOLT 1/4"-20 X 1/2"
34	XPW06	FLAT WASHER 1/4"
35	XPWR1012	OPEN-END WRENCH 10-12MM
36	XPAW05M	HEX WRENCH 5MM
37	X1727037	DATA LABEL
38	X1666039	HAND WARNING LABEL
39	X1666040	READ MANUAL LABEL

Warranty Registration

Name_____

Street _____

City _____ State_____ Zip_____

Phone #_____ Email_____ Invoice #_____

Model #_____ Serial #_____ Dealer Name_____ Purchase Date_____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?
   _____ Advertisement _____ Friend ____ Local Store
   _____ Mail Order Catalog _____ Website ____ Other:

2. How long have you been a woodworker/metalworker?
   _____ 0-2 Years _____ 2-8 Years ____ 8-20 Years _____ 20+ Years

3. How many of your machines or tools are Shop Fox?
   _____ 0-2 _____ 3-5 ____ 6-9 _____ 10+

4. Do you think your machine represents a good value? _____ Yes ____ No

5. Would you recommend Shop Fox products to a friend? _____ Yes ____ No

6. What is your age group?
   _____ 20-29 _____ 30-39 ____ 40-49
   _____ 50-59 _____ 60-69 ____ 70+

7. What is your annual household income?
   _____ $20,000-$29,000 _____ $30,000-$39,000 ____ $40,000-$49,000
   _____ $50,000-$59,000 _____ $60,000-$69,000 ____ $70,000+

8. Which of the following magazines do you subscribe to?

____ Cabinet Maker	____ Popular Mechanics	____ Today's Homeowner
____ Family Handyman	____ Popular Science	____ Wood
____ Hand Loader	____ Popular Woodworking	____ Wooden Boat
____ Handy	____ Practical Homeowner	____ Woodshop News
____ Home Shop Machinist	____ Precision Shooter	____ Woodsmith
____ Journal of Light Cont.	____ Projects in Metal	____ Woodwork
____ Live Steam	____ RC Modeler	____ Woodworker West
____ Model Airplane News	____ Rifle	____ Woodworker's Journal
____ Modeltec	____ Shop Notes	____ Other:
____ Old House Journal	____ Shotgun News	

9. Comments:_____

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CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

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Stamp
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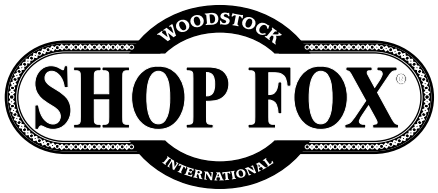

WOODSTOCK INTERNATIONAL INC.
P.O. BOX 2309
BELLINGHAM, WA 98227-2309

FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY

Woodstock International, Inc. warrants all Shop Fox machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the Shop Fox machine or machine part, which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a Shop Fox factory service center with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that Shop Fox machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all Shop Fox machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.

High Quality Machines and Tools

Woodstock International, Inc. carries thousands of products designed to meet the needs of today's woodworkers and metalworkers. Ask your dealer about these fine products:

BROSEA® PRECISION STOP BLOCK

THE REBEL®

BOARD BUDDIES®

PLANER PAL®

SLICKPLANE®

ACCU-SHARP®

ROMAN CARBIDE®

JOINTER PAL®

DURASTICK®

SOUTH BEND™

STEELEX® FINE TOOLS

STEELEX® PLUS

Rotacator®

Gutmann®

Junglee®

PARROT VISE®

PRO-STIK® ABRASIVE BELT & DISC CLEANER

Aluma-Classic®

WOODSTOCK SHOP FOX® INTERNATIONAL

WHOLESALE ONLY

WOODSTOCK INTERNATIONAL, INC.

Phone: (360) 734-3482 · Fax: (360) 671-3053 · Toll Free Fax: (800) 647-8801

P.O.Box 2309 · Bellingham, WA 98227

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